REMARKS

Claims 1 and 23 have been amended. Claims 1-24 remain for further consideration. No new matter has been added.

The objections and rejections shall be taken up in the order presented in the Official Action.

1. Acknowledgement that claims 1-24 are pending before the Office is correct.

2-3. Claims 1-3, 5-7, 9-10, 12-20 and 23-24 currently stand rejected for allegedly being anticipated by U.S. Patent 6,707,421 to Drury et al. (hereinafter "Drury").

Claim 1

Claim 1 recites a navigation system for use in a motor vehicle. The navigation system includes, inter alia:

> "a first non-volatile memory unit that stores a basic navigation database including road map information;
> a communication unit that receives supplemental navigation data including digital road map information, and provides received supplemental navigation data;
> a second non-volatile memory unit that receives and stores the received supplemental navigation data" (cl. 1)

The Official Action contends that Drury discloses "*a first non-volatile memory unit stores a basic navigation database including road map information, and a second non-volatile memory unit that receives and stores the received supplemental navigation data (see at least columns 2-3, lines 57-2; column 10, lines 10-33; columns 14-16, lines 47-32; columns 43-44, lines 63-12; and column 45, lines 31-56.*" (Official Action, pg. 2). However, a fair and proper reading of Drury

fails to disclose or suggest the first and second non-volatile memory storage features of claim 1. Each cited section of Drury identified in the Official Action shall individually addressed.

(1) Drury, within the cited section at columns 2-3, lines 57-2, discloses "*[t]he system includes a first stored database, which may be provided on a removable storage medium such as a CD-ROM, includes information related to roads in the road network within a first geographic area. The system optionally includes a second stored database that includes information related to major roads in the road network within a second geographic area. The first geographic area includes a common area within the second geographic area, and the first stored database includes information about roads in the common area that is not included in the second stored database.*" In this cited section, Drury fails to disclose or suggest supplemental navigation data stored in a second non-volatile memory, as required in claim 1. Storing navigation information in non-volatile memory allows a permanent storage of navigation data, which overcomes the problems with the prior art navigation systems discussed in the "Background" section of the present application, where such prior art systems did not store such information in non-volatile memory, which led to problems since the navigation data was not up-to-date. Also, the feature of receiving the supplementary navigation data leads to the practical benefit that the navigation database is updated with the most current information. As a result, Drury, at columns 2-3, lines 57-2 does not disclose or suggest a second non-volatile memory unit that stores received supplemental navigation date as recited claim 1.

(2) Drury, at column 10, lines 10-33, discloses, with reference to FIG. 2 "*[t]he other components includes dynamic random access memory (DRAM) 220, which provides 2 MB of working storage for processor 212, erasable programmable read-only memory (EPROM) 218, which provides 4 MB of non-volatile storage ... [p]rocessor 212 is also coupled to a static*

storage 222 which is a non-volatile storage used to store code and data for operation of the system. In particular, as is described further below, static storage 222 is used to store map-related information, such as main roads network 1000 (FIG. 10)." However, while Drury does disclose two different non-volatile storage devices 218 and 222, Drury fails to disclose the type of data stored in the EEPROM 218, while Drury affirmatively states that the static storage 222 stores the map-related information. It is submitted that, because both the EEPROM 218 and the static storage 222 are connected via the data bus 214 to the processor 212, and because of the relatively small size (4MB) of the EEPROM and the fact that the processor inherently needs some relatively small amount of non-volatile storage for the processor's basic operating program or software code, the EEPROM 218 is used to store such an operating program. This is confirmed in column 14, lines 50-52 of Drury where it is disclosed that "*code stored in working storage 410 (FIG. 4) which is made up of some combination of DRAM 220 and EEPROM 218 shown in Fig. 2,*" and further in column 14, lines 54-61 of Drury where the various operating program components of the code are described (e.g., a navigation application, a communication interface and a vehicle interface). Thus, Drury specifically stated a purpose for both the static storage 222 and the EEPROM 218, and only the static storage 222 is used to store navigation data. As a result, Drury fails to disclose or suggest the features of claim 1, where both the first and second non-volatile memory storage units store navigation data including a basic navigation database in the first non-volatile memory and supplemental navigation data in the second non-volatile memory.

(3) As discussed above in connection with column 10, lines 10-33 of Drury, columns 14-16, lines 47-32 of Drury discloses that the "*code stored in working storage 410 (FIG. 4) which is made up of some combination of DRAM 220 and EEPROM 218 shown in Fig. 2,*" and further

that the various operating program components of the code are described (e.g., a navigation application, a communication interface and a vehicle interface). The remainder of columns 14-16, lines 47-32 of Drury is a detailed disclosure within the in-vehicle database 432 of FIGs. 11 and 14 of Drury. Thus, Drury specifically states a purpose for both the static storage 222 and the EEPROM 218, and only the static storage 222 stores navigation data. As a result, Drury fails to disclose or suggest the features of claim 1, where both the first and second non-volatile memory storage units store navigation data including a basic navigation database in the first non-volatile memory and supplemental navigation data in the second non-volatile memory.

(4) Drury, at columns 43-44, lines 63-12, referencing FIG. 24, discloses that main road data is stored in the in-vehicle database 432, while regional maps 2410 are provided on a removable media such as a CD-ROM. The regional maps are provided by or derived from raw information provided by the map provider 160. Column 5, lines 55-63 defines the map provider 160 to be a vendor of map-related information or "*some other external information provider.*" Thus, Drury teaches that the map information stored in the in-vehicle database 432 is augmented by other map information on a CD-ROM. As a result, the navigation information taught by Drury is only as current as the information on the CD-ROM, which could lead to old and outdated navigation information. It also leads to a cumbersome and perhaps expensive method of obtaining updated navigation information – that is, by being forced to always get the latest CD-ROM. In contrast, claim 1 in very different from Drury in that is recites the features that not only is the supplemental navigation data stored in the second non-volatile memory, but that this supplemental data is obtained by the communication unit that then provides the data to the second non-volatile memory for storage. This provides a much easier and more reliable way of obtaining the latest navigation data. Thus, Drury fails to disclose or suggest the features of claim

1, where both the first and second non-volatile memory storage units store navigation data including a basic navigation database in the first non-volatile memory and supplemental navigation data in the second non-volatile memory, and where the supplemental data is obtained by the communication unit.

(5) Drury, at column 45, lines 31-56, discloses "*user customizable databases that are provided to the user on a removable medium, or are downloaded directly into the in-vehicle system,*" examples being the regional map 2410 of FIG. 24 or the in-vehicle database 432 within the static storage 222. However, the broad concept of a "customizable database" in conjunction with the two stated examples do not disclose or suggest the features of claim 1, where both the first and second non-volatile memory storage units store navigation data including a basic navigation database in the first non-volatile memory and supplemental navigation data in the second non-volatile memory, and where the supplemental data is obtained by the communication unit. The regional map 2410 being customizable lends nothing more towards meeting the features of claim 1 than what was already disclosed in columns 43-44, lines 63-12 of Drury, discussed above. Also, the in-vehicle database 432 within the static storage 222 being customizable lends nothing more towards meeting the features of claim 1 than what was already disclosed in column 10, lines 10-33, discussed above. As a result, Drury fails to disclose or suggest the features of claim 1, where both the first and second non-volatile memory storage units store navigation data including a basic navigation database in the first non-volatile memory and supplemental navigation data in the second non-volatile memory.

As a result of the foregoing, it is respectfully submitted that the rejection of claim 1 should be removed and that claim 1 is in condition for allowance and as such should be passed to issuance.

Claims 2-3, 5-7, 9-10 and 12-20

It is respectfully submitted that this rejection of these claims is now moot, since each of these claims depends either directly or indirectly from claim 1, which is patentable for at least the reasons set forth above.

Claim 23

Claim 23 recites a method that includes, inter alia:

> "storing in a first non-volatile memory unit connected to the navigation computer, a basic database that includes digital road map information, which is needed to calculate the driving route;
>
> receiving data supplementary to the basic database including road map information, over a network connection to a communication unit that is connected to the navigation computer; and
>
> storing the received supplementary data in a second non-volatile memory unit that is connected to the navigation computer." (cl. 23).

The Official Action contends that Drury discloses "*storing in a first non volatile memory unit connected to the navigation computer, a basic database that includes road map information, which is needed to calculate the driving route, and storing the received supplementary data in a second non volatile memory unit (see at least columns 2-3, lines 57-2; column 9, lines 7-62; column 10, lines 10-33; column 27, lines 6-29; columns 43-44; lines 63-12; and column 45, lines 32-56).*" (Official Action, pgs. 4-5). However, upon a fair and proper reading of Drury neither discloses nor suggests the first and second non-volatile memory storage features. Each cited section of Drury will be addressed as follows.

(1) Drury, within the cited section at columns 2-3, lines 57-2, discloses "*[t]he system includes a first stored database, which may be provided on a removable storage medium such as*

a CD-ROM, includes information related to roads in the road network within a first geographic area. The system optionally includes a second stored database that includes information related to major roads in the road network within a second geographic area. The first geographic area includes a common area within the second geographic area, and the first stored database includes information about roads in the common area that is not included in the second stored database." In this cited section, Drury fails to disclose or suggest that the second stored database is stored in a non-volatile type of memory, as required in claim 23. Further, Drury fails to disclose that the second non-volatile memory unit receives and stores the supplemental navigation data, also as required in claim 23. Storing the navigation information in non-volatile memory overcomes problems with the prior art navigation systems discussed in the "Background" section of the present application, where such prior art systems did not store such information in non-volatile memory, which led to problems since the navigation data was not up-to-date. Also, the feature of receiving the supplementary navigation data leads to the practical benefit that the navigation database is updated with the most current information. As a result, Drury, at columns 2-3, lines 57-2 does not disclose or suggest the two non-volatile memory storage features recited in claim 23.

(2) Drury, at column 9, lines 7-62, discloses an example of the navigation of a vehicle between a starting point and a destination point, and what happens when the vehicle operator makes an incorrect maneuver. In such a situation, Drury discloses, at column 9, lines 7-62 that "*the in-vehicle system does not necessarily have to contact the server system, relying instead on its main roads network 1000. The in-vehicle system therefore uses a combination of main roads network 1000 that is preloaded into the vehicle and spot maps 900 that are downloaded to the vehicle along with planned route 800 to replan the route when the vehicle is detected to not be*

following the planned route." This teaches the broad concept that both the main roads network and the spot maps are downloaded to the in-vehicle system. There is no disclosure or suggestion that the main roads network and the spot maps are stored in two separate non-volatile memories, as called for in claim 23. Further, as disclosed in column 10, lines 23-29, "*[p]rocessor 212 is also coupled to a static storage 222 which is a non-volatile storage used to store code and data for operation of the system. In particular, as is described further below, static storage 222 is used to store map-related information, such as main roads network 1000 (FIG. 10), which is used during route planning and guidance procedures executed on onboard computer 210.*" From this, Drury teaches a single non-volatile memory device (i.e., static storage 222) that stores map-related information. As a result, Drury fails to disclose or suggest the features of claim 23, where both the first and second non-volatile memory storage units store navigation data including a basic navigation database in the first non-volatile memory and supplemental navigation data in the second non-volatile memory.

(3) Drury, at column 10, lines 10-33, discloses, with reference to FIG. 2 "*[t]he other components includes dynamic random access memory (DRAM) 220, which provides 2 MB of working storage for processor 212, erasable programmable read-only memory (EPROM) 218, which provides 4 MB of non-volatile storage ... [p]rocessor 212 is also coupled to a static storage 222 which is a non-volatile storage used to store code and data for operation of the system. In particular, as is described further below, static storage 222 is used to store map-related information, such as main roads network 1000 (FIG. 10).*" However, while Drury does disclose two different non-volatile storage devices 218 and 222, Drury fails to disclose the type of data stored in the EEPROM 218, while Drury affirmatively states that the static storage 222 stores the map-related information. It is submitted that, because both the EEPROM 218 and the

static storage 222 are connected via the data bus 214 to the processor 212, and because of the relatively small size (4MB) of the EEPROM and the fact that the processor inherently needs some relatively small amount of non-volatile storage for the processor's basic operating program or software code, the EEPROM 218 is used to store such an operating program. This fact is confirmed in column 14, lines 50-52 of Drury where it is disclosed that "*code stored in working storage 410 (FIG. 4) which is made up of some combination of DRAM 220 and EEPROM 218 shown in Fig. 2,*" and further in column 14, lines 54-61 of Drury where the various operating program components of the code are described (e.g., a navigation application, a communication interface and a vehicle interface). Thus, Drury specifically stated a purpose for both the static storage 222 and the EEPROM 218, and only the static storage 222 is used to store navigation data. As a result, Drury fails to disclose or suggest the features of claim 23, where both the first and second non-volatile memory storage units store navigation data including a basic navigation database in the first non-volatile memory and supplemental navigation data in the second non-volatile memory.

(4) Drury, at column 27, lines 6-29, discloses that a "route download format" can be downloaded quickly from the server to the vehicle, and further discloses that "the in-vehicle system retains a memory of previously downloaded routes, and the server can refer to portions of those routes when downloading a newly planned route." This teaches the simple concept of routes being downloaded from the server to the in-vehicle system, which can retain in memory prior routes. However, such a broad disclosure of a simple concept cannot be construed as a disclosure or suggestion of the features of claim 23 where the first and second non-volatile memory storage units store navigation data including a basic navigation database in the first non-volatile memory and supplemental navigation data in the second non-volatile memory.

(5) Drury, at column 43-44, lines 63-12, discloses, referencing FIG. 24, discloses that main road data is stored in the in-vehicle database 432 while regional maps 2410 are provided on a removable media such as a CD-ROM. The regional maps are provided by or derived from raw information provided by the map provider 160. Column 5, lines 55-63 defines the map provider 160 to be a vendor of map-related information or "*some other external information provider.*" Thus, Drury teaches that the map information stored in the in-vehicle database 432 is augmented by other map information on a CD-ROM. As a result, the navigation information taught by Drury is only as current as the information on the CD-ROM, which could lead to old and outdated navigation information. It also leads to a cumbersome and perhaps expensive method of obtaining updated navigation information – that is, by being forced to always get the latest CD-ROM. In contrast, claim 23 in very different from Drury in that is recites the features that not only is the supplemental navigation data stored in the second non-volatile memory, but that this supplemental data is obtained by the communication unit that then provides the data to the second non-volatile memory for storage. This provides a much easier and more reliable way of obtaining the latest navigation data. As a result, Drury fails to disclose or suggest the features of claim 23, where both the first and second non-volatile memory storage units store navigation data including a basic navigation database in the first non-volatile memory and supplemental navigation data in the second non-volatile memory, and where the supplemental data is obtained by the communication unit.

(6) Drury, at column 45, lines 31-56, discloses "*user customizable databases that are provided to the user on a removable medium, or are downloaded directly into the in-vehicle system,*" examples being the regional map 2410 of FIG. 24 or the in-vehicle database 432 within the static storage 222. However, the broad concept of a "customizable database" in conjunction

with the two stated examples do not disclose or suggest the features of claim 23, where both the first and second non-volatile memory storage units store navigation data including a basic navigation database in the first non-volatile memory and supplemental navigation data in the second non-volatile memory, and where the supplemental data is obtained by the communication unit. The regional map 2410 being customizable lends nothing more towards meeting the features of claim 23 than what was already disclosed in columns 43-44, lines 63-12 of Drury, discussed above. Also, the in-vehicle database 432 within the static storage 222 being customizable lends nothing more towards meeting the features of claim 1 than what was already disclosed in column 10, lines 10-33, discussed above. As a result, Drury fails to disclose or suggest the features of claim 23, where both the first and second non-volatile memory storage units store navigation data including a basic navigation database in the first non-volatile memory and supplemental navigation data in the second non-volatile memory.

As a result of all of the foregoing, it is respectfully submitted that the rejection of claim 23 should be removed and that claim 23 is in condition for allowance and as such should be passed to issuance.

Claim 24

In the Official Action, claim 24 was rejected for the identical reasons as claim 1. Therefore, referring to the arguments above with respect to claim 1, it is respectfully submitted that claim 24 is patentable for at least all the same reasons as claim 1.

4-5. Claims 8, 11 and 21-22 currently stand rejected as allegedly being obvious over the combined subject matter disclosed in Drury and U.S. Patent 6,298,305 to Kabada et al.

It is respectfully submitted that this rejection of these claims is now moot, since each of these claims depends indirectly from claim 1, which is patentable for at least the reasons set forth above.

6. Claim 4 currently stands rejected as allegedly being obvious over the combined subject matter disclosed in Drury and U.S. Patent 6,522,889 to Aarino.

It is respectfully submitted that this rejection of this claim is now moot, since this claim depends indirectly from claim 1, which is patentable for at least the reasons set forth above.

For all the foregoing reasons, reconsideration and allowance of claims 1-24 is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,

Patrick O'Shea

Patrick J. O'Shea
Reg. No. 35,305
O'Shea, Getz & Kosakowski, P.C.
1500 Main Street, Suite 912
Springfield, MA 01115
(413) 731-3100, Ext. 102